1:Gabb N-5 (1873-1874) 1876
SA19 Talamanca SA19

it be perhaps, to help gather and to help carry home the corn. All the sewing is done by the men, even of the little shirts or jackets worn by the women. In carrying loads, the women rival the men in power and endurance. It is nothing uncommon to see a woman, with a big load on her back, and her year old baby seated on top, with his little legs dangling over the front edge of the load. The little monkeys ride securely there through the bush and dodge the overhanging vines and branches as expertly as could be done by an old horseman. When working for each other the people use their own machetes and axes, as a matter of course; but when hired by a foreigner, they invariably expect to be furnished with tools by their employer. 462 482 464

Domestic industry is at the very lowest ebb. Manufactures can hardly be said to exist. The only articles made, beyond furniture, arms &c., are hammocks, net bags, cotton cloth, and pottery. All of these are coarse and inferior in quality. None of the skill exhibited by the Guatemalan Indians exists here. The hammocks are made of a coarse twine, derived from the leaves of a species of *agave*, and are loosely woven in a frame with a needle. They are hardly long enough for an ordinary person to lie at length in them with comfort, and are used more for seats than for sleeping. They are swung between the posts of the house, near the door, and at a height of from a foot to a foot and a half from the floor. Everything is carried in net bags. They are made with a needle of bone and "meshed" like our fish nets. Some of them are very fine and they are of all sizes, from three inches to two feet deep. They are suspended by a string made of the same material, usually an inch wide and woven openly, in the same manner as the hammocks. The material of the finer and ordinary bags is the fibre of a species of aloe, or *agave*, much finer than that used for hammocks, and naturally nearly white. It is usually dyed of various colors to suit the fancy of the maker. The colors are obtained from several of the native plants and are very durable. A coarser kind is made of the same fibre as the hammocks. These are made with larger meshes, and are used to carry plantains, corn &c., from the field to the house. 28 32 286 [513] [386] [482]

The people of Tirribi procure all their bags from the Bri-bris, and I believe, their hammocks also. The Valientes, living beyond the Tribbis, in the adjoining parts of the District of Chiriqui, make similar bags, but much finer and more elaborately wrought. The colors in the Bri-bri nets are always arranged in simple bands, while the patterns of the Valiente nets are often complicated and exhibit considerable taste. 438 531

Belts, breech-cloths, cloths for wrapping the bones of the dead, and women's petticoats are woven of cotton. The cotton is raised with no care beyond planting a few seeds and allowing the plants to take care of themselves. They grow to the height of ten or twelve feet, and almost every house has a few in its vicinity. The yellow flowers, buds, and open bolls are seen all the year round, together on every tree. The women collect the ripe cotton, pick it from the seeds with their fingers and spin it. 286 [248] [283]

1:Gabb N-5 (1873-1874) 1876
SA19 Talamanca SA19

286 it. The loom is a simple frame of four sticks, the two upright ones are planted in the ground; the other two rudely tied to these. The warp is wrapped around the two horizontal bars and a simple contrivance of threads is arranged to open and reverse it. The thread for the woof wound on slender sticks is then passed through in the usual manner and driven tight by blows of a smooth stick. The process is exceedingly slow [462] and tedious and I have never seen it performed except by the men. The belts are usually two to three inches wide and four or five feet long. [291] Breech-cloths are about four feet long and a little more than a foot wide. The cloths for the dead and the women's petticoats are wider and a trifle longer. Except the cloths for the dead, which are woven white and afterwards painted, most of this cotton work is ornamented with colors. Be- ● [386] sides native vegetable dyes, the people of Bri-bri buy cotton dyed a dirty purple with the blood of the *murex*. This is procured from the people of [433] Terraba on the Pacific. They also now occasionally buy colored threads of foreign production, especially a rich bluish purple, of which they are particularly fond. All of this weaving is with very coarse thread, nearly as thick as the finer twines used by shopkeepers in the United States for tying small packages. The cloth is consequently coarse in texture and rough in appearance, but closely woven and soft to the feel. It makes excellent towels, though rather heavy for that purpose. The largest piece of work of this kind I ever saw, was a blanket large enough to cover a good sized double bed. It was in possession of an old woman who wanted to sell it to me for a cow, and refused ten dollars cash.

The pottery now made is the coarsest and poorest I have ever seen. 323 None of the finely made and elaborately ornamented vessels found in the 415 *huacas* or graves are made at present. The use, for half a century or more, of foreign cast-iron pots and kettles has restricted this industry, and possibly helped to injure the character of the work. But two or three vessels taken by me from Tiribi graves, certainly not less than fifty or sixty years old, are in no respect superior to those made at the present day. Native earthenware is now only used for receptacles for chicha. The jars are large—say from ten to twenty gallons capacity. The form is very simple, the workmanship is rough, the clay is coarse and badly mixed, the burning is almost always imperfect, and they are always without the slightest attempt at ornament. The jars are moulded by hand, the clay being added spirally, and moulded by the fingers and trimmed with a smooth stick, in exactly the same manner as I have seen done by the negro women in Santo Domingo. After a certain amount of drying, they are burnt in the open air, in a fire of sticks heaped over them. Each jar is burnt separately.

Although not given to unnecessary exertion, these people travel occa- 484 sionally from house to house, and even make journeys to Terraba and Limon. The laziest will gladly walk for two days to a dance. They also occasionally go off into the less frequented regions to collect sarsaparilla, with which to buy whatever of foreign manufacture they may want, like

1:Gabb N-5 (1873-1874) 1876
SA19 Talamanca SA19

to a stranger except when spoken to, and then reply in as few words as possible and with apparent bashfulness. 291

For ornaments, all wear necklaces. The favorite ones are made of teeth, of which those of the tiger are most highly prized. Only the canine teeth are used. Small strings are sometimes made of monkey, coon, or other teeth, but are not much thought of. I have seen one of these made of five strings of tiger teeth, gradually diminishing in size, and covering the entire breast of the wearer. The women rarely, almost never, wear these. If they wear teeth, they are of some very small animal. In place of them, they use great quantities of glass beads. I have seen fully three pounds of beads around the neck of one old woman, and she was the envy of all her friends and neighbors. Even little girls are often so loaded down that the weight must be irksome to them. Money is often worn by the women. On one occasion I paid a man six dollars, all in Costa Rican quarters, for his month's work. After a few days I went to his house and saw the entire sum strung on his wife's neck. Shells are also sometimes, though rarely used. The men sometimes carry, suspended from the necklace, the shell of a small species of *murex*, with the varices ground off and a hole drilled in it to make a whistle. These are bought in Terraba, and are highly prized. 301 [237]

The men sometimes wear head dresses made of feathers. The most highly prized are the white downy feathers from under the tail of the large eagle. Others are made from chicken feathers, or are worked in rows of blue, red, black, yellow, &c., from the plumage of small birds. I have seen one head-dress made of the long hair from the tail of the great ant-eater, in the place of feathers. The feathers are secured vertically to a tape and extend laterally so as to reach from temple to temple, curling over forward at the top, the tape being tied behind, so as to keep the hair in place. 237 301

Painting is somewhat in vogue, to assist in the adornment of the person, but is not confined to either sex. The commonest manner is to color each cheek with a square or parallelogram, about an inch across, either solid or made up of bars. This is done with the dark reddish-brown sap of a certain vine, and the pattern resists wear and tear, and water for a week or more. Anatto is also used, but more rarely, and is applied in bars or stripes to the face, according to the skill or taste of the artist. Besides, a hideous indigo-blue stain from a fruit, is sometimes smeared on the face or body, but even savage taste does not seem to approve of this, since it is very unusual. 302 386

Formerly the Tiribis tattooed small patterns on their faces or arms; but the younger people have not kept up the custom, and the Bri-bris and Cabecars say they never did it. The chiefs on great occasions wear gold ornaments, similar to those now found in the *Huacas*, or graves of Chiriqui. Whether these have been recovered from some of these graves, or whether they have been handed down from time immemorial is not known. There are but four or five in the tribe, and two of these belong 304 301 622

2;Skinner E-5 (1917) 1920
SA19 Talamanca SA19
Bribri

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Gabb observed facial paintings applied by both sexes, but none were seen by the writer. He refers to designs made with the reddish-brown sap of a vine, the commoner designs being squares or parallelograms, about an inch across, on each cheek. These figures were either solid or made up of bars. Another pigment, called annato, was drawn in stripes or bars on the face, or an indigo fruit juice was smeared on the face and body. Tattooing is unknown. 302 [386] [531] [386] [304]

2:Skinner E-5 (1917) 1920
SA19 Talamanca SA19
Bribri

a trifle longer. Except for the cloths for the dead, which are woven white and afterwards painted, most of this cotton work is ornamented with colors. Besides native vegetable dyes, the people of Bri-bri buy cotton dyed a dirty purple with the blood of the *murex*. This is procured from the people of Terraba on the Pacific. They also now occasionally buy colored threads of foreign production, especially a rich bluish purple, of which they are particularly fond. All of this weaving is with very coarse thread, nearly as thick as the finer twines used by shopkeepers in the United States for tying small packages. The cloth is consequently coarse in texture and rough in appearance, but closely woven and soft to the feel."

286 [292] [386] [439]

Gabb also speaks of a very large blanket of this material, large enough, he says, to cover a good-sized double bed. A plain blanket of this description was seen by the writer on Coen river.

Besides the blankets, a belt of woven cotton (pl. XVIII, *a*) ornamented with parallel bands of blue and red on the natural white ground, was obtained. It is an old specimen, perhaps the only one that remained among the Bribri. [531]

A head-band of closely woven cotton thread (pl. XVIII, *c*) was purchased of

286 the weaving women to use, and then pay her
[437] a small sum for her work if a skirt was desired.
283] Those who did not wear *mantas* still made the thread and sold it or exchanged it with the weavers for some other object. The primary cause for lack of enthusiasm in weaving appears to be the class of cotton available. The
248 *Boruca* plant a tree cotton (see p. 6) that yields a very small pod, and consequently, the Indians become discouraged at the produce. The famous "colored cotton," which is so called as it is light brown, is also planted. This is the cotton which called the Spaniard's attention so markedly in El Salvador during the
[171] Conquest, and which is used today by the *Cayapa* Indians of Ecuador.[25] This colored cotton does not have to be dyed. It is, however, more delicate to make into thread than
283 the white cotton, as it breaks oftener. The best spindles, as the best looms, and weaving
[286] instruments of the *Boruca* are made of pejibaye palm, although *chonta*, both *mana-kra'* and more seldom *kanagira* (see pp. 12–13), are considered good (see fig. 9, *b*). The whorl, is commonly of bone, but pejibaye, *chonta*, and occasionally pottery whorls are seen. Some of the whorls are undecorated, but some have incised horizontal grooves (fig. 9, *b–3*, *4*).

To make thread, the cotton is removed from
[248] the burr and carefully deseeded by hand, the seeds being saved for planting. The cotton is then put on a hide, and the women take two sticks, one in each hand, and beat the cotton making it as smooth as possible, after which, it is pulled into wide strips and rolled into balls. When the cotton is ready, the woman sits on a low bench and puts the spindle in a gourd on the ground. She holds the spindle in her right hand and the thread in her left, between the thumb and index finger, working so fast that it seems as if the spindle is rarely in her hand at all. This process the Indians call "dancing," as the spindle literally dances in the gourd (see fig. 5, *c*).

386 Once the thread is made, it is either left its natural color or dyed. The *Boruca* still have a few colors which they dye themselves, but red, yellow, green, and bright blue are bought,
[439] generally not as dyes, but as already colored mercerized cotton thread, at the nearest *ladino* town. Due to the relatively high price of these

386 threads, the Indians lamented to the writer that they had forgotten how to make many of the beautiful colors their ancestors knew. In particular, they wanted to know how to obtain a bright blue. As a consequence, the seeds [123] of the broad-leaf indigo were sent them for planting.

The colors still made by the *Boruca* are black, light yellow, pale blue, and purple. Light brown is obtained by using the natural colored cotton, as stated before. Formerly, red was made by boiling the leaves of the sangrilla tree which is called *rus kra'* in Boruca, and is abundant in the neighboring forests. At present, they do not make this dye, as they seem to think it too much trouble. A fast jet black is procured by cooking the bark of a tree called *carbonero* (*Guarea guara* (Jacq.) P. Wil.) in Spanish, and *grisin-kra'* in Boruca, and combing the liquid with a black clay found in the vicinity. Light blue is made from a narrow-leaf indigo (*Indigofera suffruticosa* Mill.) which abounds by the river. The leaves are boiled for dye. Purple is obtained on the sea coast near Punta Mala and Dominical. Here a mollusk (*Purpura patula* Gould), called *la morada*, is gathered at low tide off the rocks which jut out of the water along the shore. Formerly, the Indians swam out to the rocks with the cotton thread on top of their head 237 to collect the animal.[26] The *Boruca* have no 386 tradition of any of this. At the present time, they gather the mollusk when the tide is out from the shore, and from the rock they can reach by wading. Great pain is taken not to let the creature die. On obtaining the mollusk, they first turn over the shell so that the sea water runs out. Then they blow into the shell, holding the thread in front. The angry animal spits out a fluid on the thread, after which he is thrown back into the sea. This fluid is at first a greenish-yellow, but when dry, becomes deep purple.[27] They say that the ink is best when the moon is full, and no good when the moon is new. At other times, the color is not so strong, nor does it dye evenly. [648] This dye has long been prized not only by the

[26] See Cockburn, 1779, p. 112.

[27] According to Dr. W. J. Clench, Museum of Comparative Zoölogy, Harvard University, this dye is a drug used by the snail to anesthetize its victim.

[28] See Fernández, 1907, vol. IX, pp. 353–54; Cock-

[p. 17-A]

237 Indians, but also by the Spaniards who de-
386 manded purple thread, during the Conquest
[648] and the colonial period, as tribute for the church as well as for themselves.[28] For a more complete discussion of this purple dye in other parts of Central America, see MacCurdy.[29] Another, not so strong, purple dye is gathered from a small mollusk (*Purpura kiosquiformia* Duclos) which lives on the roots of the mangrove trees (*Rhizophora Mangle* L.). This creature must be killed to be of use. The soft part of the shell is removed, and the liquid it contains is put on a thin stick and *drawn* on the material in the same manner as using a colored pencil. When first applied, the liquid is black, but it turns purple on drying. This is employed very seldom today, as the little weaving that is done has generally woven designs, and is not painted.

286 The actual weaving is done by the women
[462] seated on the low bench that is characteristic of the *Boruca* (see p. 13). The loom used is horizontal with a warp beam and a back strap, the other end of the loom being fastened to the wall of the house or to a tree (see fig. 9, *d*). The crossing of the weft is accomplished with a straight wooden rod, after which the woof is pressed into position with a wooden sword slightly longer than the width of the cloth. A shed stick is used, but there is no heddle rod. The width of the web is kept even by the temple, which is a piece of cane, preferably the part near the inflorescence, with a bone point at each end (see p. 18).

The cloth woven by these people is usually
[531] heavy with a stripe design (see fig. 7, *d*). Some women, however, weave a conventionalized geometric pattern horizontally across the white space between the stripes (see fig. 9, *a*), not permitting the design to appear on the
[171] reverse side of the cloth. This is a single-faced weft-pattern weave, and is a technique unknown elsewhere in Central America. It has been found in ancient graves on the Ecuadorian coast, by the island of Puna.[30] Men's belts are also striped, although the thread used and the weaving is finer than that of the skirts.

burn, 1779, p. 112.

[28] See MacCurdy, 1911, pp. 160-61.

[115] [29] Information given to the writer by Professor Carlos Zeballos M., Director of the Municipal Museum, Guayaquil, Ecuador.

[p. 17-8]

3:Stone E-5 (1945) 1949 SA19 Talamanca SA19
Boruca

825

APPENDIX B: NAMES OF BIRDS, ANIMALS, FISH, AND REPTILES

ENGLISH	IN COSTA RICA	SCIENTIFIC
	A	
armadillo	*cusuco; armadillo*	*Dasypus novemcinctus* Linn.
	B	
bee (wild) from Cocos Island[1]		*Apis Trigona* or *Apis Melipona*?
bee (wild)	*jicote*	*Melipona beecki* ssppp. *beecki*
bushmaster	*cascabela muda*	*Lachesis mutus*
	C	
clam	*almeja*	?
crab (river)	*cangrejo del río*	*Pseudothelphusa magna*
crayfish	*camarón*	?
croaker	*roncador*	?
curassow	*pavaol*	*Crax rubra* Linn.
	D	
deer	1) *cabra* 2) *venado*	1) *Mazama sartorii* Saussure 2) *Odocoilus* Boddaert
	G	
guan (crested)	*pava*	*Penelope purpurascens* Wagl.
gaetus	*guatusa*	*Dasyprocta* sp.
	M	
macaw (scarlet)	*lapa; guacamaya*	*Ara macao* Linn.
mollusk (large for purple dye)	*caracol; murula*	*Purpura patula* Gould
mollusk (small, for purple dye)	*caracol; molusco*	*Purpura biosquiformis* Duclos
monkey (red)	*mono colorado*	*Ateles geoffroyi* Kuhl
monkey (white-faced)	*carablanca*	*Cebus capucinus* Linn.
mullet (fresh water)	*tepemechin*	*Agonostomus monticola* C. V.
	P	
parakeet	*perico*	*Aratinga canicularis* Linn.
parrot	*loro*	*Amazona auropalliata* Less.
perch	*mojarra*	*Cichlasoma altifrons* Kner. & Steind.
pig (peccary)	*chancho del monte*	*Pecari angulatus* Cope
pig (wild boar?)	*cariblanco*	*Tayassu pecari* Fischer
pigeon	*paloma*	*Columba* sp.
pigeon (white wing)		
	S	
snook	*robalo*	*Centropomus pectinatus* Poey
	T	
tepezcuintle	*tepezcuintle*	*Coelogenys paca*
tinamou (chestnut-headed)	*gallina del monte*	*Tinamus major* Gmel.
toucan	*curré*	*Rhamphastos ambiguus* Gould

[386]

[1] The result of the analysis of the sample of Cocos Island Wild Bees Wax by the Laboratorio Químico Oficial, República de Costa Rica, was the following:

Resin	78.17%
Wax	8.65%
Substances insoluble in ether	13.18%
	100.00%

Humidity	3.12%
Ashes	3.20%
Sugars	0.20%
Glues	0.00%

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286 nique. Very seldom does one see bags woven
415 from cotton or *guariomo* fiber. This last is
[184] found among the Cabécares, particularly on the Pacific side.

286 There are two types of weaving, single or double loop.[89] Those for ordinary purposes are single looped and are generally made with the fingers alone, although at times a bone needle is used to open the hole. The fine meshes, however, are made with needles of
[412] *pejibaye* thorns, and those a bit coarser with
824 needles of deer or monkey bones. The coarse
[237] bags are always plain and undyed. The better
[531] ones, however, are decorated with horizontal bands of red-brown, yellow, and black. (*see* Dyes).

285 **Baskets.** *Havas* or carrying baskets are made
824 by men from vines (*bejuco de hierro*) and are
[482] suspended down the back by a tumpline. Baskets for household use only are fashioned from the vein of the white *bijugua* leaf or from palm leaves or cane. Crudely made vine
[231] basket-nets are used for setting hens and hung on the outer walls of the houses.

●386 **Dyes.** Red dye for decorating net bags is
824 obtained from the leaves of a vine (*Arrabidae chica* [H. & B.] Verl.)[90] and by rubbing the leaf of *Melastomaceae* sp. A darker red or purple-red comes from the leaf of the red *higuerilla* (*Ricinus communis* L.). On the Pacific side, yellow is made from the bulb of the *yuquilla* (*Curcuma longa* L.), whereas in the Talamanca region it is extracted from a vine called *skəbərko* in Bribri. Black is made by rubbing with *ojo de buey* (*Mucuna mutisiana* D.C.), and in Cabécar it is obtained from a leaf called *səkíbaL*. This must be mashed and rubbed dry on the fiber because if wet, it is ineffective.

352 **Hammocks.** Hammocks are made principally by Bribri men from *cabuya* thread although *pita* is also used (*see* Fibers), and occasionally by the Cabécares from bark cloth (*see* Bark Cloth). There are two sizes of Bribri hammocks. The largest one is generally used by the Bribri themselves and the smaller one,

[89] Skinner, 1920, pp. 58–62, gives a detailed description of these weaves.
[171] [90] This is also used in the interior of South America.
[91] Gabb, 1875, pp. 511–12.

[P.100(B)]

Bribri
Cabecar

FOOD VALUE OF THE PEJIBAYE[2]

(*Guilielma gasipaes* Bailey)

146
262

		Red Variety	Yellow Variety
Iron	mg.	1.16	1.31
Carrotin	"	1.945	1.493
Thiamine	"	.070	.057
Riboflavin	"	.140	.099
Niacin	"	1.945	1.493
Ascorbic Acid	"	22.9	41.4

PLANT LIST WITH USES

BRIBRI

	Latin	Use
824 [278] chichilugru	*Smilax* sp.	root is grated, boiled and liquid drunk for Parkinson's disease
apíkicha	*Gouania*	Mother whose child has died bathes with this. The whole vine is used.
[845]		
[272] [844] stjkɔ	*Cymbopogon citratus*	for tea and washing skin of new born
klokɔ	*P. auriculatus* H.B.&K	for tea and washing skin of new born
ɛrekɔ	*Miconia impetiolaris* D.Don	for tea and washing skin of new born

CABÉCAR

	Latin	Use
[278] popolí	*Protium* sp.	boil resin and drink liquid to stop vomiting
[386] bólk	*Melastomaceae* sp.	make red dye from the leaf without cooking it
[515]	*Solanacis* sp.	for teeth, mash leaf to clean them
[278]	*Peperomia* sp.	for heart